

CLAIMS

- 1/ A fuel tank comprising a shell formed by assembling together at least two tank portions made by molding a plastics material and, when assembled together, defining the inside surface of the tank, said tank including a fuel pump fixed to its inside surface prior to the tank portions being assembled together.
- 2/ A tank according to claim 1, wherein the shell of the tank has no through orifice suitable for enabling a fitting to be inserted into the inside of the tank.
- 3/ A tank according to claim 1, in which the fuel pump has a body, wherein the shell of the tank has no through orifice of section greater than the section of the fuel pump body.
- 4/ A tank according to claim 1, wherein the fuel tank has no through orifice in register with the fuel pump.
- 5/ A tank according to claim 1, including at least one fitting such as a fuel gauge fixed to the inside surface of the tank and separate from said fuel pump.
- 6/ A tank according to claim 1, including a compartment placed at a low point of the tank, and one of the tank portions includes a filler tube whose end through which the fuel leaves is positioned in such a manner that, during filling, the fuel drops into the compartment.
- 7/ A tank according to claim 6, wherein the compartment is molded integrally out of the same material as the said portion of the tank.
- 8/ A tank according to claim 6, including the fuel pump inside said compartment.

9/ A tank according to claim 1, wherein the pump is supported by support means serving to avoid transmitting vibration from the pump to the tank.

5 10/ A tank according to claim 9, wherein the support means comprise a central portion arranged to receive the pump, and fins enabling the central portion to be held and arranged to be fixed to the wall defining said compartment.

10 11/ A tank according to claim 1, wherein the two tank portions are made by injection molding a thermoplastic material.

15 12/ A tank according to claim 1, wherein at least one of the tank portions has fixing means for enabling a fitting to be fixed inside the tank, said fixing means being integrally molded out of the same material as said tank portion.

20 13/ A tank according to claim 12, wherein the fixing means comprise at least one wall projecting into the inside of the tank.

25 14/ A tank according to claim 13, wherein the wall has at least one recess suitable for receiving a fixing member of the fitting.

30 15/ A tank according to claim 13, wherein said wall has at least one tooth for snap-fastening in a recess of the fitting.

35 16/ A tank according to claim 1, wherein at least one of the tank portions includes a housing enabling a fitting to be fixed on the tank from outside the tank, said housing being defined by a wall integrally molded with the corresponding tank portion.

17/ A tank according to claim 16, wherein said fitting is a fuel filter.

5 18/ A tank according to claim 16, wherein said fitting is a canister.

10 19/ A tank according to claim 1, wherein one of the tank portions substantially forms the bottom half while the other substantially forms the top half.

15 20/ A tank according to claim 1, wherein the bottom portion of the tank includes a housing defined by a wall integrally molded out of the same material as said portion, and suitable for receiving a fuel filter.

20 21/ A tank according to claim 1, wherein the top portion of the tank includes a housing defined by a wall integrally molded out of the same material as said portion, for the purpose of receiving a canister.

22/ A tank according to claim 1, wherein the inside surface of the tank includes substantially vertical ribs.

25 23/ A tank according to claim 22, wherein at least one rib has a passage passing through its base to allow fuel to flow therethrough.

30 24/ A tank according to claim 1, including a fuel gauge fixed to the inside surface of the tank.

35 25/ A tank according to claim 1, including a pressure regulator fixed to the inside surface of the tank close to its low point.

26/ A tank according to claim 1, wherein the tank portions are assembled together by adhesive or by heat-sealing.

5 27/ A method of manufacturing a fuel tank, the method comprising the following steps:

a) making a least two tank portions out of plastics material by molding;

10 b) fixing a fuel pump to the inside surface of one of the tank portions; and

c) assembling the tank portions together.

15 28/ A method according to claim 27, wherein the two tank portions are made by injection molding a thermoplastic material.

20 29/ A method according to claim 27, wherein one of the tank portions constitutes the bottom portion of the tank, and wherein the following are fixed to the inside surface of said portion:

- the fuel pump;
- a pressure regulator; and
- a fuel gauge.

25 30/ A method according to claim 27, wherein one of the tank portions constitutes the top portion of the tank, and wherein the following are fixed to the inside surface of said portion:

- a check valve;
- 30 - a filler tube; and
- a degassing duct.

35 31/ A fuel tank comprising a shell formed by assembling together at least two tank portions made by molding a plastics material and, when assembled together, defining the inside surface of the tank, said tank including a compartment placed at a low point of the tank and one of

said tank portions includes a filler tube whose end through which the fuel leaves is positioned in such a manner that, during filling, the fuel falls into the compartment.